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AUTHOR McCoy, Marilyn; Fincher, A. Lawrence
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ABSTRACT

Discussed is the need to examine a number of measures of the "level" of state support of postsecondary education (e.g., in terms of a state's population, its students, and the level of state revenues). Described are factors that need to be considered as planners attempt to better understand the specific context surrounding state support decisions. The kinds of higher education institutions supported in the state, the extent to which other sources provide funding, the differential financial ability of states to furnish support, and the effects of inflation are all influences that need to be examined. Abstracted are a number of key facets of the analysis process as they affect institutional-state relations. For example, some of the tradeoffs concern the level of detail at which such analysis is conducted and how this relates to management jurisdiction; the choice between using existing data that may be less accurate but more timely and less burdensome for institutions than the collection of new data; the appropriateness of comparative analysis, both between states and within a single state; and the responsibility of researchers in presenting analytic findings and limitations. (Author/KE)

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ANALYSIS OF STATE FINANCIAL SUPPORT OF HIGHER EDUCATION: PITFALLS AND PROMISES

MARILYN McCOY
PROJECT DIRECTOR
STATEWIDE ANALYSIS PROJECT
NATIONAL CENTER FOR HIGHER EDUCATION
MANAGEMENT SYSTEMS (NCHEMS)
at
WESTERN INTERSTATE COMMISSION FOR
HIGHER EDUCATION (WICHE)
P.O. DRAWER P
BOULDER, COLORADO 80302
303-492-8106

A. LAWRENCE FINCHER
ASSISTANT VICE PRESIDENT
STATE RELATIONS
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48104
313-764-4461

HE 008 186

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Marilyn McCoy
A. Lawrence Fincher

NCHEMS
University of Michigan

ABSTRACT

Analysis of State Financial Support
of Higher Education: Pitfalls and Promises

As states continue to assume increasing responsibility for the financial support of postsecondary education, it becomes ever more critical to understand the complex of factors which influence the provision of that support. This paper, based on a recent study by one of the authors, will dicuss the need to examine a number of different measures of the "level" of state support of postsecondary education (e.g., in terms of a state's population, its students [by sector and type of institution], and the level of state revenues). More importantly, in addition to refining the procedures for measuring the amount of state support, the paper will describe the type of factors which need to be considered as planners attempt to better understand the specific context surrounding state support decisions. The kinds of higher education institutions supported in the state, the extent to which other sources provide funding, the differential financial ability of states to furnish support, and the effects of inflation all represent the kinds of influences which need to be examined.

In addition to reporting the major conclusions of this empirical study, the discussion will abstract a number of key facets of the analysis process, as they affect institutional-state relations. For example, some of the tradeoffs concern the level of detail at which such analysis is conducted and how this relates to management jurisdiction; the choice between using existing data which may be less accurate, but more timely and less burdensome for institutions than the collection of new data; the appropriateness of comparative analysis, both between states and within a single state (e.g., among sectors of institutions); and the responsibility of researchers in presenting analytic findings and limitations.

Introduction

As financial resource constraints become more critical in postsecondary education planning and management, the need for more comprehensive analysis that goes beyond simple measures of the "level" of support has become more apparent. While measures of the "level" of support (e.g., state dollars per student) clearly identify differences among states, and among institutions within states, such measures are inadequate in contributing to an understanding of the "reasons" for these differences. The importance of a more complete examination of state support is clear to those at the state level and within institutions who continue to be involved in the process of arbitrating state support. Too often discussions about the adequacy of state financing become sidetracked in debates over the source of data, the specific measures used, and the accuracy of information.

While these concerns are likely to persist (and in many cases rightfully so), the importance of dealing more directly with the substantive issues associated with financial support is being increasingly recognized. The task, however, is a complicated one. Conflicting pressures continue to be felt as to whether state support is adequate relative to the number of students being educated; as to the resources available to the state for providing support; with respect to the type of programs offered; relative to the state need to fund competing social programs; and in the context of efforts by the state and postsecondary institutions to maintain program quality in the face of serious inflation. These conflicting influences illustrate the complex nature of the resource allocation process within a state. They also make evident the increasing need for representatives of higher education to make their case in more specific and meaningful terms.

This paper summarizes the methodology and findings of a recent NCHEMS study of state and local support of higher education directed by one of the authors. In addition, the paper will abstract general insights gained from the study and other institutional-state experiences of the authors. The pitfalls and promises in the analysis of state financial support will be highlighted. Because of the extent to which institutional-state interaction has recently been focused in the area of information and analysis (e.g., increased reporting requirements and the need to project policy impacts), it appears particularly important that researchers explore the implications of their work for institutional-state relations.

Description of the Study[1]

The study is an empirical analysis of state and local financial support of higher education for all fifty states. Existing data was used from a number of sources, such as the National Center for Education Statistics, the U.S. Census Bureau, the National Association of State Scholarship Programs and others. The major focus of the study is the development of a more comprehensive framework for analyzing the role of state and local support. The approach starts with a detailed analysis of the variety of ways in which state and local support can be measured and the important consequences of these procedures in affecting the level of support actually measured. It differs from previous studies on this topic in its use of data reported by institutions as to the amount of funding received from the state. This focus on recipients contrasts with the approaches used by

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[1] State and Local Financial Support of Higher Education, 1973-74; and 1972-73, Marilyn McCoy, et al., National Center for Higher Education Management Systems (NCHEMS), Boulder, Colorado, April, 1976.

both M. M. Chambers and Glenny-Ruyle, which rely on the responses of state higher education agencies (the providers of support) in indicating the extent of state support of higher education.[2]

The main emphasis of the study is an attempt to more comprehensively describe the variety of influences which may affect support patterns in states and institutions. Examples of these factors include the following:

- Different Distribution Patterns -- that is, the differing ways state and local higher education dollars are spent (e.g., for institutional and student aid, by type of institution, by major institution function, etc.) and how these may be tied to state support levels.

- Levels of Institutional Expenditures -- how the overall level of funds spent by institutions (expenditures per student) and the state and local proportions of those expenditures influence state support levels.

- Other Sources of Support -- the extent to which non-state sources (e.g., federal government, private donors, students, etc.) provide higher education funds and how these appear to substitute for state and local dollars.

- State Goals and Objectives -- how differing state goals, such as student access, affect state and local support levels.

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[2]See M. M. Chambers, Appropriations of State Tax Funds for Operating Expenses of higher Education 1974-75, (Washington, D.C.: Office of Research and Information of the National Association of State Universities and Land-Grant Colleges, 1974).

See Glenny and Ruyle, State Tax Support of Higher Education: Revenue Approrpiations Trends and Patterns, 1963-1975. (Revised version).

- State Tax Capacity -- how the differing income and wealth bases among the states and their mechanisms for taxing this wealth affect state and local support of higher education.

- Competing State and Local Programs -- the extent to which other state programs like health, highways, and others compete for state and local dollars.

- Other Factors -- a discussion of some additional considerations, such as inflation, that may be related to state and local support levels.

These factors are analyzed for public and private higher education separately. In addition, the institutional analysis is further disaggregated by major type of institutions (i.e., university, four-year, and two-year institutions). The analyses encompass two years of data currently, covering fiscal years 1973 and 1974.

Selected National Findings

While the primary value of this study resides in the state-by-state profiles of financing and related factors, a number of interesting national patterns are also visible. A selected number of these findings are cited to illustrate the types of financing patterns which exist. It should be remembered, however, that these examples represent national averages and that a detailed examination of these measures for specific states show substantial variations from these composites. The following summary comments for FY 1974 are noted:

A. *LEVEL OF STATE SUPPORT*

- As expected, the majority of state and local financial support is provided to the public sector of higher education. Of the total amount of support provided by state and local sources to higher education (for educational and general purposes), 96% is funneled to the public sector ($49/capita to the public sector and $2/capita to the private sector).
- From FY 1973 to FY 1974, state and local support to the public sector, per student and per capita, increased by 14%. When this increase is adjusted for inflation effects, the real dollar increase is 6%. However, as a percentage of total state and local revenues, higher education's share shows a proportional decline of 7% (from 5.6% of total state and local revenues to 5.2%).

B. *THE DISTRIBUTION OF STATE SUPPORT*

- While state and local support of higher education increased by 14% (per student), the extent to which particular groups of institutions shared in this pattern varied considerably. From FY 1973 to FY 1974, state and local support of public universities decreased 26% on a per student basis. By contrast, four-year public institutions showed an increase in per student support of 25% and two-year institutional support grew by 17%. These changes have been computed on a per student basis, to adjust for shifting enrollment among the institutional groups.
- Other differences are evident. In FY 1974, state and local support in public universities was $2174 per student. This level was 10% higher than support to four-year institutions ($1972 per student) and 50% higher than funding to the two-year colleges ($1438 per student). However, in

terms of the total dollars distributed (that is absolute dollars, not per student dollars), four-year institutions receive 39% of all funds, universities 35% and two-year institutions 26% of total dollars from state and local sources.

- The majority of state and local support (97%) is for "general purposes." Only 3% of state contributions are provided to support "sponsored research" and "other sponsored programs." This contrasts sharply with federal higher education support of public institutions, where 51% of federal dollars are for sponsored research purposes and other sponsored programs receive another 31%. Funds for general institutional programs such as instruction only accounted for 18% of federal support. Even these funds often are "designated", by use, for specific workshops and other functions. This pattern clearly illustrates the very limited extent to which federal funds can be viewed as substitutes for state support. Most federal funding received by institutions is for specific contracted purposes.

C. *INSTITUTIONAL EXPENDITURES*

- Expenditures in private institutions (for educational and general purposes) are approximately 40% higher per student than in public institutions ($4036 vs. $2898). The major reason for this difference appears to be the fact that spending in private universities is 56% higher than in public universities. In part, this may be due to the greater focus in the private sector on graduate level education. In the private sector, 17% of all enrollments are at the graduate level, whereas 10% of public enrollments are at this level. Differences in public-private spending rates are less marked for

the other two classes of institutions. In four-year colleges, private institutional expenditures are 7% higher than in the public sector, and 10% higher in private two-year institutions than these same institutions in the public sector.

- In the public sector, institutional expenditures overall increased 12% between FY 197[illegible] and 1974. Increases in university spending were less than this average rate and increased by only 7%. In four-year institutions, expenditures increased by 18% and there was a 15% increase in two-year institutional spending.

- The share of total expenditures which state and local funding supports in the public sector varies markedly by class of institution. While overall, 65% of public institutional expenditures are covered by state and local sources, two-year institutions show a markedly higher reliance on state funding sources. Eighty-two percent of public two-year institutional expenditures are supported through state and local financing. For four-year institutions, this percent is 68% and for universities it is 53%. While state and local funding provides the majority of support for all institutions, the dependency of these sources does vary substantially by type of institution.

D. *OTHER REVENUE SOURCES*

- An examination of revenue sources indicated that in FY 1974, 60%[3] of all educational and general revenues, received by public institutions, were from state and local sources. The federal government contributed an

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[3]In the previous paragraph, it was noted that the proportion of expenditures that are supported by state and local sources was 65%. These percentage differences are due to the use of different bases (i.e., in one case institutional "expenditures" and in another institutional "revenues."

additional 14%, and revenues from student tuition charges provided 16% more. (An additional 10% was received from private philanthropy, institutional income, and "other" sources.) When compared with the data on revenues in FY 1973, these figures indicate that the relative share provided by state and local sources is increasing, while federal and student contributions are decreasing proportionally. (Per student revenues from federal and from tuition sources are increasing, but at a lesser rate than state and local support.)

- In the private (independent) sector, the role of specific revenue sources differs markedly from those exhibited in public institutions. Only 4% of revenues in private institutions are from state and local sources. Fifty percent of revenues come from student tuition charges, 20% from the federal government, 13% from private sources, and 11% from institutional income (including endowment income).

E. *STUDENT ENROLLMENT*

- Nationally, enrollments in the public sector are almost evenly distributed among the three types of institutions. Thirty percent of public student enrollments are in universities, 37% in four-year institutions, and 33% are in two-year institutions. In the two time periods studied, there was a 1% share shift from universities to the two-year sector. While the foregoing description applies to the U.S. as a whole, the distribution of enrollments among types of institutions does differ a great deal among states. These state differences are mentioned here in recognition that the national average rates of state support described previously are also tied to the enrollment patterns just described. Thus a state in comparing

its support rate to the national average should also compare its enrollment mix and other specific characteristics to those which describe the national profile. For example, if a state had a greater than average enrollment in community colleges, it might expect its state support level to be lower than the national average if its state system was not counterbalanced by greater than average university enrollments. (Note this represents only one characteristic of a state's educational system and other factors should be considered as well.)

- Two further extensions of this national profile involve comparisons of enrollment rates to specific population groups. The ratio of student enrollments in public institutions to the number of persons aged 18-20 is .46. This population attendance ratio has shown almost no change from 1972-73 to 1973-74. First-time public student enrollment as a percentage of the number of high school graduates is .62. This represents a 13% increase since 1972-73.

E. *TOTAL STATE EXPENDITURES*

- The level of total state expenditures per capita increased between FY 1973 and FY 1974 by 17%. However, education and higher education both experienced some decrease in their relative shares of the state budget. Health and hospitals, and public welfare also experienced some relative decline in proportional shares, whereas highways and "other" (includes police, administration, etc.) both increased slightly.

A Single State Example

While the summary patterns just described are indicative of the U.S. profile, individual state patterns often differ markedly from these overall averages.

Table 1 provides selected financial support and related measures for 3 states in order to illustrate some of the particular kinds of individual profiles which exist. The states were selected because of their differences in size, economic base, and educational structure and should not be viewed as "peer" states. Rather, they were chosen because of their illustrative value in demonstrating the diversity of individual state patterns which exist. While the profiles portrayed in Table 1 will not be discussed in detail, a single example will be cited to illustrate the manner in which these varying factors interrelate in better explaining a particular state's financing pattern.

In Colorado, when state and local support is related to the state's population base (support/capita), the data in Table 1 indicate that Colorado's citizens provide support at a rate that exceeds the national average by 16%. When that support is related to the number of students supported in public institutions, however, the pattern shifts and Colorado's support is 20% below the national average. The information in the remainder of the table provide some explanation for this pattern. For one, Colorado educates a larger than average number of students in its educational system (as evidenced by the substantial enrollment of out-of-state students [noted by a large differential between support per public student and per public resident student], by higher than average enrollments relative to the number of 18-20 year olds in the state [.60], and by a high reliance on public education in the state [88% of enrollments are public]). In addition the level of state support and proportion of institutional expenditures which the state provides are lower than average. In part, though, this lower state role in each type of institution is compensated for by higher than average federal contributions and tuition revenues. Still, in two of the

Table 1
PROFILE OF STATE AND LOCAL SUPPORT
OF HIGHER EDUCATION AND RELATED FACTORS, IN THREE STATES
1973-74

	STATE AND LOCAL HIGHER EDUCATION SUPPORT MEASURES				DISTRIBUTION PATTERNS OF STATE AND LOCAL SUPPORT TO PUBLIC INSTITUTIONS (PER PUBLIC STUDENT)						STATE AND LOCAL SUPPORT RELATED TO PUBLIC HIGHER EDUCATIONAL INSTITUTIONAL EXPENDITURES					
	PUBLIC SECTOR			PRIVATE SECTOR	BY TYPE OF INSTITUTION			BY PROGRAM PURPOSE			UNIVERSITIES		FOUR-YEAR INSTITUTIONS		TWO-YEAR INSTITUTIONS	
	Per Capita	Per Public Student	Per Pub. Res. Student	Per Private Student	Univ.	4 Year	2 Year	General Purpose	Sponsored Research	Other Sponsored Programs	$ Exp./ Student	State Portion	$ Exp./ Student	State Portion	$ Exp./ Student	State Portion
U.S. Average	$49	$1881	$2036	$262	$2174	$1972	$1438	$1833	$14	$35	$4130	53%	$2913	68%	$1764	82%
California	79	1938	1972	213	3506	2304	1509	1887	3	48	7316	48%	3599	64%	1445	104%
Colorado	57	1504	2021	16	1306	1571	1412	1441	10	52	3633	36%	2719	58%	1896	74%
New Jersey	36	2013	2082	346	2394	2100	1256	1964	16	32	3729	64%	2979	70%	1885	72%

	SUPPORT FROM SELECTED NON-STATE SOURCES TO PUBLIC INSTITUTIONS Per Student		SELECTED ACCESS MEASURES		STATE FINANCIAL CAPACITY		STATE SPENDING FOR SOCIAL PROGRAMS	
	Federal Support	Tuition Revenues	Public Enrollment # of Persons 18-20	% of Enrollment at Pub. Institutions	Tax Revenues Capita	Tax Revenues Relative to Tax Capacity	Total Per Capita State Expenditures	% of Expenditures for Higher Education
U.S. Average	$434	$503	.46	75%	$623	100%	$ 940	5.4%
California	420	238	.70	88%	773	112	1119	7.1%
Colorado	597	660	.60	88%	601	106	954	6.1%
New Jersey	259	674	.36	73%	680	112	978	4.0%

institutional types (universities and four-year institutions) the expenditure levels are somewhat lower than average. A more detailed analysis of programs in these institutions would be necessary to determine whether this pattern is appropriate or not. The remaining information reiterates the point that the state in terms of its tax capacity and public expenditure rate is contributing to higher education at a rate above the U.S. average.

This simplified example provides an initial profile of state financing in Colorado that can be extended, through use of other analyses in the study report and through more detailed analyses of intra-state data. It is useful, though, in beginning to illustrate the advantages of using more extensive data than simple "level" measures of state support, which brand a state as "high" or "low."

Pitfalls and Promises

In addition to the basic framework of the study, the research project has provided a basis for abstracting a number of key facets that are generalizable for state-institutional perspectives. These facets concern the scope of analysis undertaken and its jurisdictional implications; factors associated with the selection of data in terms of its accuracy and the costs imposed on reporting institutions and other units; the appropriateness of comparative analysis both between states and within a single state (e.g., among types of institutions); and the general process of state and institutional analysis and how they can be effectively interfaced.

A. *SCOPE OF THE ANALYSIS*

- One of the major promises of this study is that it represents an initial effort in providing a comprehensive set of interstate comparisons, which

can be used for measuring and assessing the level of state financial support. The complaint is often made in postsecondary education that decisions are made on the basis of simple "high" and "low" distinctions, without sufficient reference to the actual characteristics and distinctive features of the system being decided upon. By providing a starting mechanism for the fuller examination of the dimensions of postsecondary support, the study will hopefully encourage the pursuit of questions to the point of greater understanding. Implicit in this description is the need for an interactive relationship between state and institutional officials in examining the components of state support. Such a relationship implies mutual involvement in the use of these analyses and the provision of further supporting information where needed. It also implies a process of mutual exploration, not simply after the fact justification, in which the answer or conclusion comes first, then the facts and analysis are constructed to fit. This might be termed the "grasshopper effect" -- a lot of jumping around until the suitable explanation is found. However, to the extent that a reasoned analysis of factors lays out the jumps in the short run, it encourages misuse of data through the selective use of only those factors which are favorable. Such misuse cannot be totally prevented, but a strategy of trying to describe the "full picture" and disseminate that description appears in the long run to be the most viable strategy.

Related to this concept of comprehensive treatment of an issue is an approach which focuses on "dual accountability." In the context of an analysis of state financial support, two-sided accountability implies that state funding be evaluated from two perspectives: the perspective of

institutions and students -- are they being adequately supported?; and one of the state -- how able is the state to provide this support? While there are a variety of dimensions to these two perspectives, each focus has to be included in the analysis to accurately reflect the dynamics of the financing issue. Some of these factors include critical analysis of the characteristics of postsecondary education in the state, student enrollment rates, state tax capacity, and competing social needs. These and other factors have been included in the study.

- Related to the concept of dual accountability are analytical efforts which include an analysis design that can be used to clarify "fundor-funds recipient" jurisdictions. One example in this regard is the identification of the extent to which funds provided are "legally restricted" to specific uses (e.g., a contract for sponsored research). To the extent that fundors pre-specify the uses, they remove certain degrees of accountability from recipients, by pre-empting portions of management perogatives. Such actions reduce management flexibility to determine when an appropriate specification at one time -- appropriations -- may not be appropriate at another -- subsequent program delivery. An illustration of this can be found in the rapidly changing expenditure needs for utilities. A good institutional manager will be flexible in shifting some funds to keep classrooms adequately heated although it may take away from available instructional dollars. Demands of accountability taken to the extreme would lead to instruction in cold, dimly lit classrooms.
- While the analysis of state support contained in this study is probably the most comprehensive of its kind, to date, the topic warrants substantial further study. A number of important extensions can be identified. For

one, the full range of postsecondary programs offered in the states have not been included (e.g., vocational education, proprietary institutions, adult education programs), because of the non-availability of data to support such analysis. Yet given state concerns in inter-sector tradeoffs among all postsecondary programs, the importance of including the full spectrum of postsecondary alternatives is stressed. It would also be desirable to have access to analyses of this sort which portray states' profiles over a longer time period. Without explicitly accounting for changes over more extensive time periods, it is difficult to evaluate the extent to which a state's financing profile has changed.

B. *DATA CONCERNS*

- Given the extent to which state-institution relations have centered on the issue of data reporting, an important dimension of this study is its use of existing data rather than the initiation of new data collection efforts. This approach has been used in recognition of the high costs associated with adding another layer of reporting requests on higher education institutions, costs which institutions most frequently are asked to absorb. In addition, this strategy was seen as an important mechanism for assessing the utility of existing data collection efforts. For example, Higher Education General Information Survey (HEGIS) data collected by National Center for Education Statistics (NCES) is regularly collected but few documented uses of these data exist. If these data are not valuable, they obviously should not be collected. If they have utility, it should be documented as a clear incentive for those reporting the data. The importance of recognizing this connection between data use and data

accuracy is critical. This study provided one case example which can be used to improve future data collection efforts.[4]

- There were a number of other advantages associated with the use of existing data. The use of these data is more timely than new collection efforts. In addition, the data sources that were used provided extensive detail as a back-up source for eventual users to access in order to further pursue the topic. Further, the ongoing nature of these data sources provides assurance that these analyses can be replicated in future years.
- There are, however, numerous pitfalls associated with the use of existing data. For one, such data do not always readily match the research design of secondary users. Second, the accuracy and credibility of any data set is always open to question. In fact, the number of data values often appears to be related to the number of data collectors. A graphic example in this regard is shown in Table 2. Three different sources of information about state support levels are shown and in only a few states do the numbers agree. This points out a particularly difficult problem associated with all analysis efforts -- whose numbers should be believed?

TABLE 2

COMPARISON OF 1973-74 DATA FOR
COMBINED INSTITUTIONAL AND STUDENT APPROPRIATIONS
(Millions of Dollars)

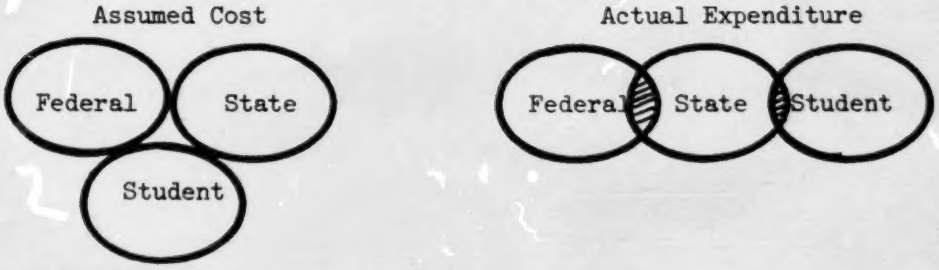
	Chambers 1973-74 (State Only)	Glenny-Ruyle 1973-74 (State Only)	HEGIS EDSTAT II-Boyd Combined 1973-74 (State & Local)	HEGIS EDSTAT II-Boyd Combined 1973-74 (Local Only)
Alabama	$148	$138	$142	$ 2
Alaska	23	missing	20	*
Arizona	136	116	155	24
Arkansas	73	74	76	*
California	1,142	1,225	1,658	405
Colorado	134	139	141	5
Connecticut	120	120	119	1
Delaware	34	29	31	*

*Less than 1

[4] Mechanisms for achieving this result and funneling the data-related experiences of the study are being explicitly pursued. Following the completion of the field review of the 1973-74 study, a position paper for dissemination to data collectors is being developed by the study staff and project reviewers.

C. *COMPARATIVE USES OF DATA*

- Given the absence of absolute standards or benchmarks, states and institutions have relied on the use of comparisons for assessment and evaluation. While such comparisons can provide important references when properly applied, the process of making comparisons is an extremely difficult one. There is an initial problem in identifying the units to be compared. Should only like units be compared (e.g., one research university with another) or is it appropriate in assessing inter-institutional financing tradeoffs to compare different units (e.g., four-year school with a two-year institution).
- While this study provides no mechanism for limiting any form of comparison, the intended methodology is one in which comparisons are made in the context of extensive descriptive information. This approach is intended to clarify the similarities and differences of the units being compared.
- Another problem in comparative analysis is the difficulty of obtaining truly comparable data. While this problem is understandable given the diversity of accounting procedures, calendar systems and operating modes, it does complicate comparison efforts. An example of one specific form of this problem is a recent health science cost study which began with an assumption that cost components were federal capitation grants, state appropriations, and student fees. These sources of revenue could be identified, but as they comingle in an actual operation, their simple direct sum is not an adequate measure of the cost to teach the discipline. A Venn diagram such as follows illustrates the problem:



The point simply is that the accounting frame of reference requires mutually exclusive data entries, whereas real support must take into account the joint characteristics of these systems.

- In recognition of data comparability problems, an extensive amount of effort has been expended in this study to document the specific types of data problems which exist, and the extent to which specific states have identified case examples of these problems. Such documentation provides an important interpretative tool for those reviewing the analyses, as well as a firm basis for efforts to improve future data collection procedures.
- Another danger associated with comparative analysis is the tendency by some users to convert "average" values to "standard" values. While it is for this reason that this study has attempted to provide a more comprehensive description of the reasons for differences in support levels, the potential to ignore a full state profile and instead concentrate on simple "level" differences does exist.

Summary

The Statewide Analysis Project of the NCHEMS at WICHE has been presented for information purposes to institutional researchers. Existing data for FY 1973 and FY 1974 have been cataloged and analyzed. Data problems have been exposed and interpretive factors have been outlined.

Promises of this project have been stated in terms of the extension of analyses on the topic to better explain differences in support patterns; better utilization of existing data; efforts to improve future data collection; and the identification of some important aspects of comparative analysis. Pitfalls have focused on the potential misuse of data, the inaccuracy of existing data, and the pressure to average down.

An examination of the project process and results should provide institutional researchers with ideas for extension of the work and/or an ability to cope with the pressures associated with analyses of state financial support of higher education.